



DEPARTMENT OF THE ARMY
OMAHA DISTRICT CORPS OF ENGINEERS
8014 U.S. POST OFFICE AND COURTHOUSE
OMAHA, NEBRASKA 68102

REPLY TO
ATTENTION OF

September 5, 1985

Environmental (SF) Branch

Mr. Roy Schrock
U.S. Environmental Protection Agency
Region III
841 Chestnut Street
Philadelphia, Pennsylvania 19106

Dear Mr. Schrock:

Enclosed are the Corps of Engineers, Missouri River Division, comments on the latest revision to the feasibility study for the Sand, Gravel and Stone Superfund Site in Elkton, Maryland.

If you have any questions, please contact Ms. Kathryn Schenk, Telephone: FTS 864-4868 or 402-221-4868.

Sincerely,

S. L. Carlock, P.E.
Chief, Environmental (SF) Branch
Engineering Division

Enclosure

00905

ORIGINAL

(Red)

<input type="checkbox"/> HRD <input checked="" type="checkbox"/> Omaha District		CORPS OF ENGINEERS ENGINEERING REVIEW COMMENTS		TO:	
PLANS & SPECIFICATIONS AND/OR DESIGN REPORT <input checked="" type="checkbox"/> PROBLEM F.S. <input type="checkbox"/> FINAL <input type="checkbox"/> AS-ADV.		DESIGNED BY: <input checked="" type="checkbox"/> AE <input type="checkbox"/> DIST		PROJECT: Sand, Gravel & Stone Site	
LOCATION OR BASE: Elkton, Maryland		INVITATION NO.:		BID OPENING DATE:	
COMMENTS BY: R. Donovan		BRANCH OR SECTION: Geotech Br.		DATE: 4 September 1985	
DRAWING NUMBER OR PARAGRAPH NUMBER	ITEM NUMBER	COMMENTS	SHEET <u>1</u> OF <u>1</u>	PHONED TO: (Name/Date)	
9.1.3	1.	State Design Basis for 2 foot thick clay cap.			
9.5	2.	Table 9-1-6 not included.			
10.4.1	3.	See comment 1.			
	4.	Table 9-1-3 retained clay, FML, & Soil additives for study. Only clay discussed in this RAA. What happened to FML & soil additives?			
	5.	Table 10-4-1 indicates 83,500 cy of soil needed for clay cap. Discuss availability of this quantity and construction time vs. FML.			
10.5.1	6.	Interceptor trenches consist of open sheet-piled excavations. Discuss whether the groundwater contaminant may corrode the sheetpile.			

ORIGINAL
(Red)

<input type="checkbox"/> MRD	CORPS OF ENGINEERS ENGINEERING REVIEW COMMENTS	TO:		
<input checked="" type="checkbox"/> Omaha District				
PLANS & SPECIFICATIONS AND/OR DESIGN REPORT	DESIGNED BY:	PROJECT:		
<input checked="" type="checkbox"/> PRELIM <input type="checkbox"/> FINAL <input type="checkbox"/> AS-ADV.	<input checked="" type="checkbox"/> AE <input type="checkbox"/> DIST	Sand, Gravel and Stone		
LOCATION OR BASE: Elkton, MD	INVITATION NO.:	BID OPENING DATE: Feasibility Study		
COMMENTS BY : Tomlann McDaniel	BRANCH OR SECTION : Geology Sec.	DATE: 30 August 1985		
DRAWING NUMBER OR PARAGRAPH NUMBER	ITEM NUMBER	COMMENTS	SHEET 1 OF 1	PHONED TO: (Name/Date)
	1.	Suggest that pump test be run on the shallow aquifer to confirm the hydraulic conductivities obtained from the slug tests. No rate of pumping from the trenches was given in the report. This will be necessary for the treatment plant design.		
	2.	Is there any reason to believe that water will not easily recharge through the ponds and swamp?		
	3.	The number of drums given is based on a number of assumptions. This number could easily be overrun or underrun and this should be kept in mind when determining bid items.		

ORIGINAL
(Red)

<input type="checkbox"/> MRD <input type="checkbox"/> District		CORPS OF ENGINEERS ENGINEERING REVIEW COMMENTS		TO: K. Schenk MDRD-2	
PLANS & SPECIFICATIONS AND/OR DESIGN REPORT <input type="checkbox"/> PRELIM <input type="checkbox"/> FINAL <input type="checkbox"/> AS-ADV.		DESIGNED BY: <input type="checkbox"/> AE <input type="checkbox"/> DIST		PROJECT: Sand, Gravel, & Stone, FS	
LOCATION OR BASE: Elkton, MD		INVITATION NO.:		BID OPENING DATE:	
COMMENTS BY: G. Shearer		BRANCH OR SECTION: MDRD-1		DATE: 8/30/85	
DRAWING NUMBER OR PARAGRAPH NUMBER	ITEM NUMBER	COMMENTS			PHONED TO: (Name/Date)
Specific	1.	Description of Alternative D-1 (p. 10-42). The			
10.6.1.1		report states that "The RI data showed that grossly			
(For A/E)		contaminated soils did not descend beyond 3 to 4			
		feet below the surface." Only 6 samples were taken			
		below 3 feet which is an insufficient number of			
		samples to base that statement on. Also, the data			
		do not necessarily agree with that statement. For			
		example:			
		<u>SAMPLE</u>	<u>6"</u>	<u>3'</u>	<u>4'</u>
		SSS-11 Acetone	670	2700	No sample
		SSS-16 Acetone	ND	580	500 µg/kg
		There may be some spots where significant soil			
		contamination is present below 3 feet.			
9.5	2.	Table 9-1-6 is referred to at the top of the page			
(p. 9-42)		and Table 9-1-7 is referred to near the bottom of			
		the page. Both tables were present and numbered			
		9-1-6 and 9-1-7 in the preliminary Draft FS. The			
		tables should be renumbered 9-3-1 and 9-3-2 respec-			
10808		tively. Table 9-3-1 (formerly 9-1-6) is missing in			
		this final Draft FS. Table 9-3-1 in this final			
		Draft FS (formerly 9-1-7) would then have to be			
		numbered 9-3-2.			

ORIGINAL
(Red)

<input type="checkbox"/> MRD <input type="checkbox"/> _____ District		CORPS OF ENGINEERS ENGINEERING REVIEW COMMENTS		TO: K. SCHUNK MRD-D-E	
PLANS & SPECIFICATIONS AND/OR DESIGN REPORT <input type="checkbox"/> PRELIM <input type="checkbox"/> FINAL <input type="checkbox"/> AS-ADV.			DESIGNED BY: <input type="checkbox"/> AE <input type="checkbox"/> DIST		PROJECT: Sand, Gravel, & Stone Feasibility Study
LOCATION OR BASE: Nikton, Cecil County, Maryland			INVITATION NO.:		BID OPENING DATE:
COMMENTS BY: J. Carroll			BRANCH OR SECTION: MRD-D-L		DATE: 14 Aug 85
DRAWING NUMBER OR PARAGRAPH NUMBER	ITEM NUMBER	COMMENTS	SHEET <u>1</u> OF <u>1</u>		PHONED TO: (Name/Date)
General		The monitoring phases of all alternatives evaluated			
		appear adequate to identify gross changes in			
		contaminant composition and extent of migration.			
Fig. 10-3-1 & Table 10-3-1		The figure shows Residential Well 10 and the			
		Table list Residential Well 07. (Otherwise the			
		two agree.) These should be made consistent.			
Alternative D-1		Excavation is anticipated to a depth of 3 feet			
		(on pg. 10-37). While this may be an appropriate			
		mean for cost estimation, for the remedial action			
		itself a set of contaminant concentrations should			
		be used as an action level. Then the work would			
		not simply "approach the point of diminishing			
		returns," but would reach the defined point of			
		insufficient return.			
		Since the action level used depends on projections			
		of the leaching of residual contaminants and other			
		potential pathways of exposure, these levels			
		should be studied as part of the FS and not simply			
		added in the ROD.			
Alternatives D-2, E		See comment under D-1.			

PRELIMINARY

<input type="checkbox"/> MRD <input type="checkbox"/> _____ District		CORPS OF ENGINEERS ENGINEERING REVIEW COMMENTS		TO: Bruce Little MRD-2 (Red)	
PLANS & SPECIFICATIONS AND/OR DESIGN REPORT <input type="checkbox"/> PRELIM <input type="checkbox"/> FINAL <input type="checkbox"/> AM-ADV.			DESIGNED BY: <input type="checkbox"/> AE <input type="checkbox"/> DIST		PROJECT: Sand, Gravel and Stone Site RI
LOCATION OR BASE: Elkton, MD		INVITATION NO.:		BID OPENING DATE:	
COMMENTS BY: G. Shearer		BRANCH OR SECTION: MRD-2-L		DATE: 5/10/85	
DRAWING NUMBER OR PARAGRAPH NUMBER	ITEM NUMBER	COMMENTS	SHEET <u>1</u> OF <u>3</u>	PHONED TO: (Name/Date)	
General	1.	There are three names which seem to be used interchangeably - Maryland Sand and Gravelstone Co., Maryland Sand, Gravel, and Stone Co., and Sand, Gravel, and Stone Co. Is there any real difference between them?			
	2.	Most of the maps are quite blurry and hard to read, which made it difficult for us to ascertain where samples were taken. The clearest one is Figure 4-4-8 (p. 4-63).			
	3.	This RI report lists only data from this project. Data from earlier studies were not included as is often done in RI reports at other sites. Data from earlier studies would be helpful in analysing the site.			
	4.	Ponds 01 and 02 and the waste close by appears to have the highest levels of organic contamination by far (samples WS-12, SED-21, and SED-04). The concentrations are very high, but the values cannot be used with much confidence when so much of the analysis data has been rejected. The data in			

<input type="checkbox"/> MRD <input type="checkbox"/> _____ District		CORPS OF ENGINEERS ENGINEERING REVIEW COMMENTS		TO: Bruce Little MRD-E	
PLANS & SPECIFICATIONS AND/OR DESIGN REPORT <input type="checkbox"/> PRELIM <input type="checkbox"/> FINAL <input type="checkbox"/> AS-ADV.			DESIGNED BY: <input type="checkbox"/> AR <input type="checkbox"/> DIST		PROJECT: Sand, Gravel and Stone Size RT
LOCATION OF BASE: Eiklon, MD		INVITATION NO.:		BID OPENING DATE:	
COMMENTS BY: G. Shearer		BRANCH OR SECTION: MRD-E-1		DATE: 5/10/85	
DRAWING NUMBER OR PARAGRAPH NUMBER	ITEM NUMBER	COMMENTS	SHEET <u>2</u> OF <u>3</u>	PHONED TO: (Name/Date)	
		Table 5-2-3 (volatile organics in sediments) shows			
		an inadequate level of quality control. Seven			
		vials were broken before they ever got to the lab			
		for analysis, and the rest of the data has far too			
		many rejected values. Some of the other tables			
		have more rejected data than I would like to see,			
		but 5-2-3 is the worst.			
	5.	The waste samples were analyzed for the 8 ACRA			
		metals by EP Toxicity Test. The other samples			
		were analyzed for 10 of the priority pollutant			
		metals. Probably should have analyzed for the			
		13 priority pollutant metals.			
	p. 4-61	First sentence mentions three bedrock boreholes.			
		However, only one is mentioned anywhere else.			
	p. 4-71	"None of these stations detected VOC species . . ."			
		SNW-18 and SNW-19 are included in this statement.			
		However, Table 4-4-9 (p. 4-69) shows up to 12			
		volatile organics in these samples, including			
		chlorobenzene at 5,380 µg/L.			

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(Red)

<input type="checkbox"/> MRD <input type="checkbox"/> District		CORPS OF ENGINEERS ENGINEERING REVIEW COMMENTS		TO: Bruce Little KROED-R	
PLANS & SPECIFICATIONS AND/OR DESIGN REPORT <input type="checkbox"/> PRELIM <input type="checkbox"/> FINAL <input type="checkbox"/> AS-ADV.		DESIGNED BY: <input type="checkbox"/> AE <input type="checkbox"/> DIST		PROJECT: Sand, Gravel and Stone Site RI	
LOCATION OR BASE: Elkton, MD		INVITATION NO.:		BID OPENING DATE:	
COMMENTS BY: C. Shearer		BRANCH OR SECTION: KROED-L		DATE: 5/10/85	
DRAWING NUMBER OR PARAGRAPH NUMBER	ITEM NUMBER	COMMENTS	SHEET <u>3</u> OF <u>3</u>		PHONED TO: (Name/Date)
p. 5-5,5-7		The location of sample SW-30 is not marked on Figure 5-1-4. The location of SW-36 on Figure 5-1-4 is marked on the wrong side of Old Elk Neck Road.			
p. 5-8		(Next to last paragraph) Pond 03, not 01, was monitored by Stations SW-05, -06, and -07.			
8-14, 8-15		Using TCLO, TD50, TDLO, etc. can be somewhat confusing. TDLO, LDLO, etc. values could be due to a lab animal that has a great deal of geological variability compared to the average. TD50, LD50, etc. values should be much more reproducible.			